

Special product features

# POWER QUALITY ANALYZERS, METERS & LOGGERS

## Three-Phase Power Quality Analyzer



### PowerPad® III Model 8435

**Memory capacity of 2GB for trend data storage: Up to 50 captured snapshots, 210 captured transients, 1 inrush and 10,000 alarm events**



(upon registering)



**Captures & records transients, events & waveforms simultaneously!**



### Four voltage and four current inputs

#### ► SPECIFICATIONS

<b>MODEL</b>	<b>8435</b>
<b>ELECTRICAL</b>	
<b>Sampling Frequency</b>	256 samples/cycle
<b>Data Storage</b>	2GB SD Card for trend recording; Additional separate 12.5MB partitioned memory for snapshots, transient/inrush & alarms
<b>Voltage (TRMS)</b>	Phase-to-Phase: 2000V Phase-to-Neutral: 1000V Voltage Ratio: up to 500kV
<b>Current (TRMS)</b>	MN Clamp: 0 to 6A/120A or 0 to 240A SR Clamp: 0 to 1200A MR Clamp: 0 to 1000Aac, 0 to 1400Aac MiniFlex®: 10 to 1000A AmpFlex®: 10 to 6500A <sup>(1)</sup> Current Ratio: 10mA to 50kA
<b>Frequency (Hz)</b>	40 to 69Hz
<b>Other Measurements</b>	kW, kVAR, kVA, PF, DPF, kWh, kVARh, kVAh, K-Factor, Flicker
<b>Harmonics</b>	1 <sup>st</sup> to 50 <sup>th</sup> , Direction, Sequence
<b>Power Source</b>	9.6V NiMH rechargeable battery pack (included) External AC supply: 110/230VAC ±10% (50/60Hz)
<b>Battery Life</b>	≥8 hours with display on; ≤35 hours with display off (record mode)
<b>MECHANICAL</b>	
<b>Communication Port</b>	Optically isolated USB
<b>Display</b>	¼ VGA (320 x 240) color LCD display with adjustable brightness & contrast
<b>Dimensions</b>	9.8 x 7.8 x 2.6" (250 x 200 x 67mm)
<b>Weight</b>	4.3 lbs (1.95kg)
<b>Safety Rating</b>	EN 61010, 600V CAT IV <sup>(2)</sup> , 1000V CAT III, Pollution Degree 2

<sup>(1)</sup>Crest factor at 6500 = 1

<sup>(2)</sup>When used with SR193 or AmpFlex® probes. 600V CAT III with MN193 or MR193 probes.

#### ► FEATURES

- Measurement of TRMS voltages up to 1000Vrms AC/DC for two-, three-, four- or five-wire systems
- Measurement of TRMS currents up to 6500Arms (sensor dependent)
- Direct measurement of neutral current & voltage
- Frequency measurement (40 to 69Hz systems)
- Record and display trend data as fast as once per second for one month for up to 25 variables
- Transient detection on all V and I inputs (up to 210)
- Selectable PT and CT ratios
- Inrush current measurement
- Calculation of Crest Factors for V and A
- Calculation of the K-Factor for transformers
- Calculation of short-term flicker and three-phase voltage unbalance
- Measures harmonics (referenced to the fundamental or RMS value) for voltage, current or power, up to 50<sup>th</sup> harmonic
- Displays of harmonic sequencing and direction and calculation of overall harmonics
- Real-time display of Phasor diagrams including values and phase angles
- Measurement of active, reactive and apparent power per phase and their respective sum total
- Calculation of power factor, displacement power factor and tangent factor
- Recording, time stamping and characterization of disturbance (swells, sags and interruptions, exceedence of power and harmonic thresholds)
- 2GB internal Trend Recording memory; Alarm, Snapshot and Transient/Inrush memories are separate
- Measurement of energy VAh, VARh & Wh
- The Max and Min RMS measurements are calculated every half-period
- Includes DataView® software for configuring, real-time display, analysis and report generation
- 65µs/sample transient recording

#### ► PRODUCT INCLUDES

##### 8435 Kit

Extra large tool bag, accessory pouch, 5 ft USB cable, five 10 ft black voltage leads with alligator clips, 110V US power cord, four water-tight AmpFlex® A196-18-BK (included with Cat. #2136.42 only), NiMH battery, SD-Card (2GB), twelve color-coded input ID markers, quick start guide, and a USB stick containing DataView® software and user manual.



**CALRIGHT INSTRUMENTS**

The Right Source For Your Test & Measurement Needs

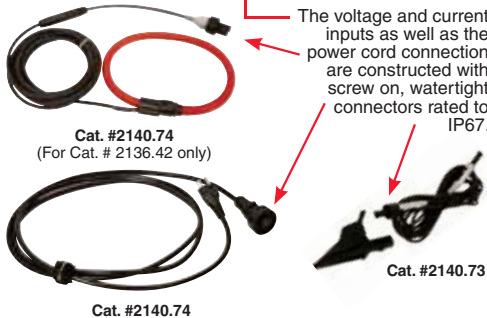
8715 Mesa Point Terrace San Diego, CA 92154  
Toll Free: 1.866.363.6634 Tel: 1.619.429.4545 Fax: 1.619.374.7012  
Email: sales@calright.com <http://www.calright.com>

# PowerPad® III Model 8435

## Large Color Functional Displays

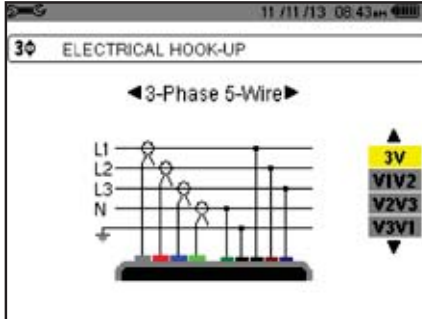
### Installation of the Leads and Current Sensors

Color-coded ID markers are supplied with the PowerPad® III to identify the leads and input terminals.

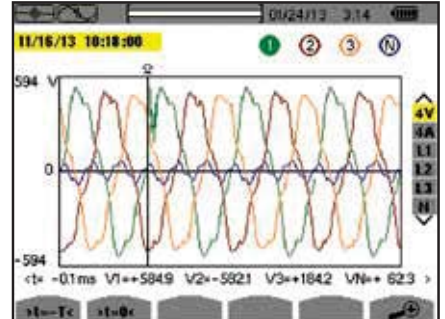


The voltage and current inputs as well as the power cord connection are constructed with screw on, watertight connectors rated to IP67.

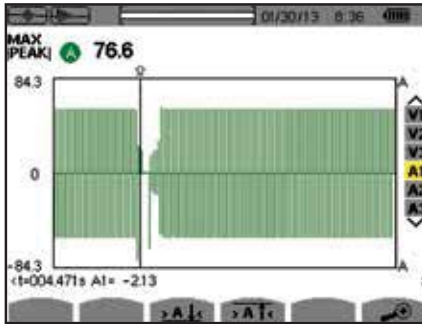
### Configuration



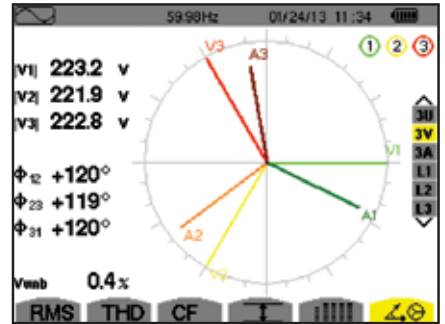
### Transient Mode



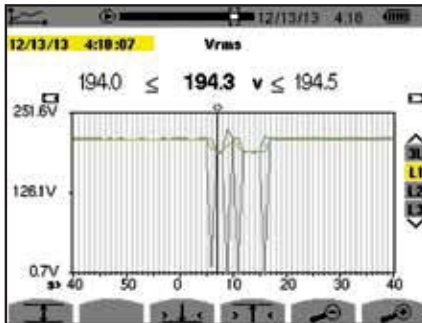
### Inrush Peak



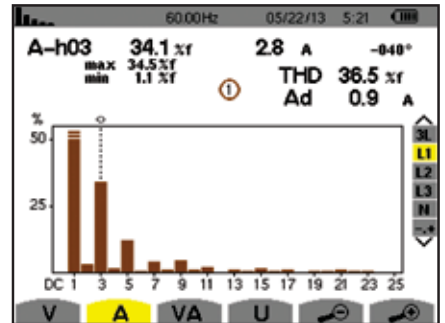
### Phasor Diagram



### Trend Analyze



### Harmonics Mode



### CATALOG NO. DESCRIPTION

2136.41	PowerPad® III Model 8435 (No Sensors - Waterproof IP67)
2136.42	PowerPad® III Model 8435 w/4 A196-18-BK (AmpFlex® - Waterproof IP67)
2133.73	Extra Large Classic Tool Bag
2140.72	Replacement accessory pouch (accessories not included)
2140.19	Replacement – Battery 9.6V NiMH
2140.28	AC Current Probe Model MR193-BK (1000Aac/1400Aac)
2140.32	AC Current Probe Model MN93-BK (200A)
2140.33	AC Current Probe Model SR193-BK (1200A)
2140.35	AmpFlex® Sensor 36" Model 193-36-BK (6500A)
2140.36	AC Current Probe Model MN193-BK (5A/100A)
2140.45	Replacement – Set of 12, Color-coded Input ID Markers
2140.46	Replacement – 5 ft USB Cable
2140.48	MiniFlex® Sensor 10" Model MA193-10-BK (1000A)
2140.73	Lead – One 10 ft (3M) Black Lead (Waterproof cap) [Rated 1000V CAT IV] & one Black Alligator Clip [Rated 1000V CAT IV, 15A,UL]
2140.74	AmpFlex® Sensor 18" (Waterproof - IP67) Model A196-18-BK